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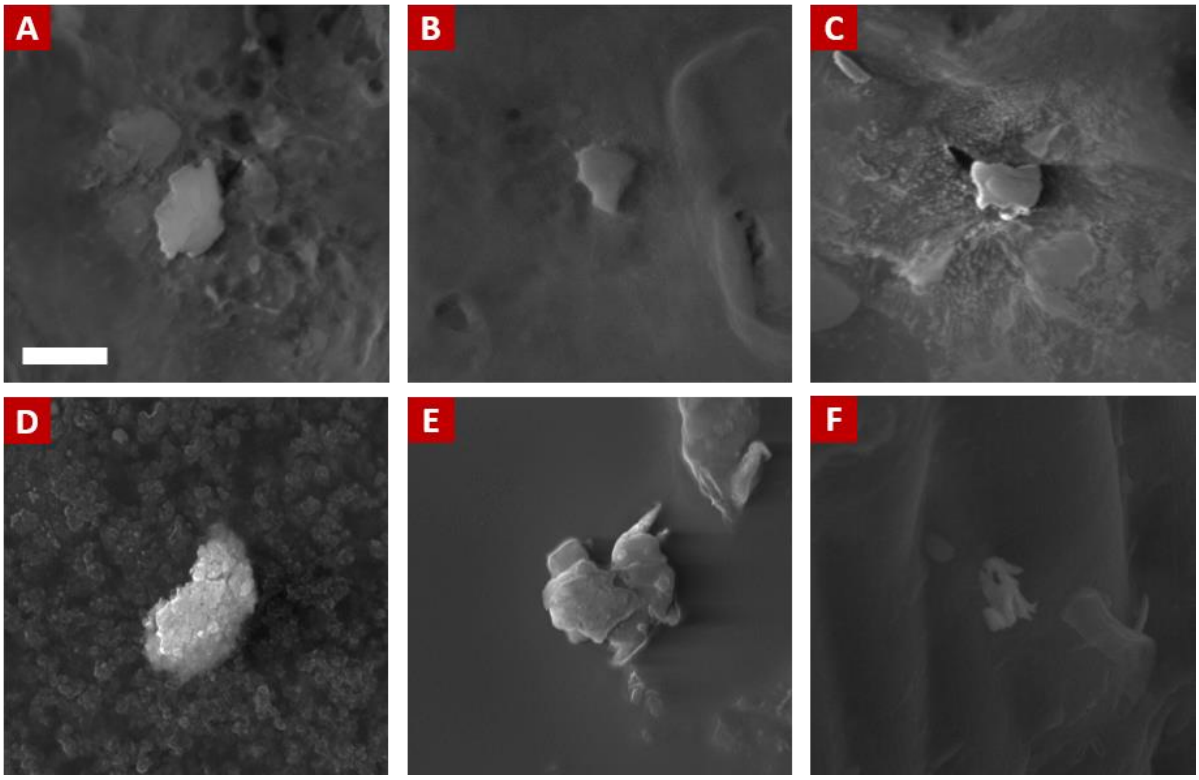

Figure 1. SEM images showing uranium-containing particles under variable pressure conditions observed on the surfaces of moss and lichen material. Scale bars: 1 μm.

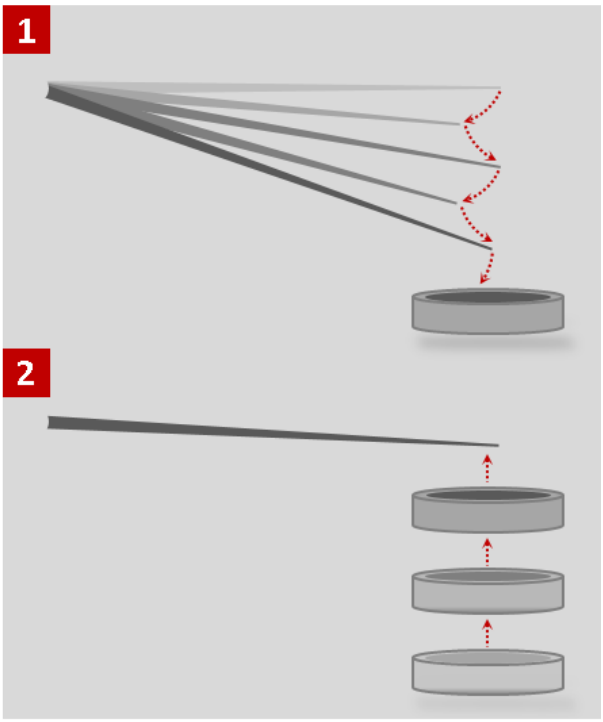

Figure 2. Sequence steps progressing the needle of the Kleindiek Micromanipulator into contact with the sample via, (1) a saw-tooth motion lowering and subsequently extending the tip into eventual contact with the sample or (2) centring both the particle and needle under the electron-beam and raising the stage to the tip.

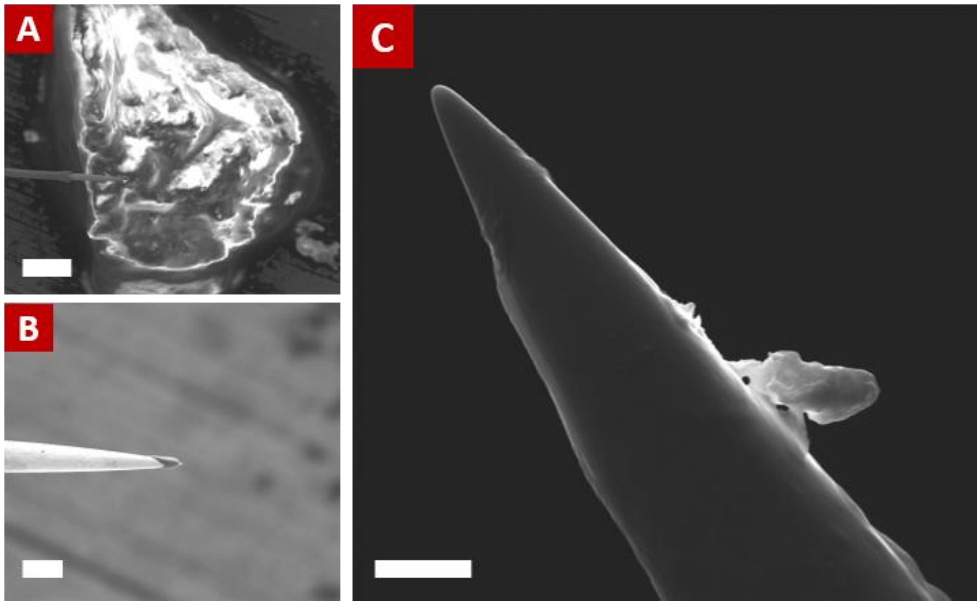

Figure 3. Steps detailing the removal of a particle from the containing bulk material, (A) application of SEMGlu™ to the top of a needle, (B) progressive movement of needle into eventual contact with the particle, before increasing the beam-current to polymerise the adhesive to render the particle strongly attached to the end of the needle (C). Scale bars: 15 µm (A), 2 µm (B), 1 µm (C).

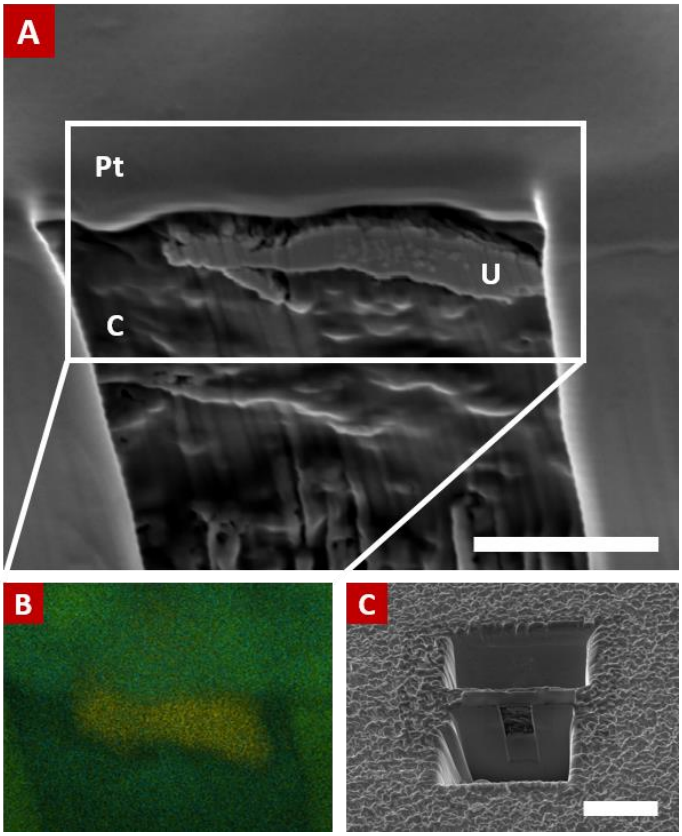

Figure 4. (A) Gallium ion-beam section through particle D to reveal its internal structure with platinum protective strip, uranium particle and underlying carbon mount identified, (B) EDX mapping of the particle to confirm distribution of uranium throughout sample and (C) continued ion-beam cutting to remove sample for TEM analysis. Scale bars: 1 μm (A and B), 5 μm (C).

Site	Distance from FDNPP (km)	Bearing
Okuma *(Restricted Zone)*	5.1	WSW
Nagadoro *(Restricted Zone)*	33.3	NW
Iitate Village	35.7	NW
Kawamata Village	37.4	NW
Emataira	58.8	NW

Table 1: Summary table of the sites sampled during May 2014 and October 2015 as part of the initial particle extraction and analysis study.